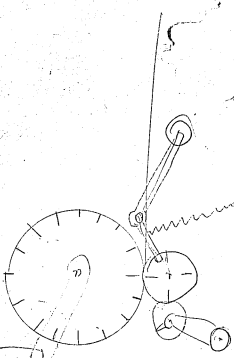
Unbound Notes and Drawings (1903)

This folder contains dated notes and drawings from 1903, as well as undated material possibly from the same year. Included are items by Edison, John F. Ott, and others pertaining to phonographs, phonograph records, electrical meters, kinetoscopes, and other matters. Some of the phonograph material involves a disc phonograph. Several items were witnessed by Ludwig F. Ott and Frank L. Dyer.

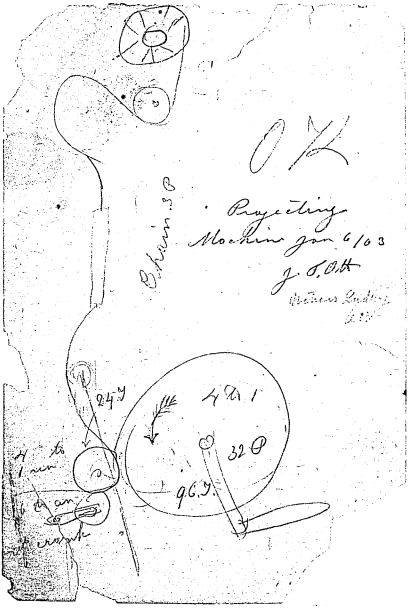
Approximately 60 percent of the documents have been selected. Among the items not selected are several fragmentary memoranda by Edison and drawings by John F. Ott of machine tool parts for making storage battery components.



Movement for Meters

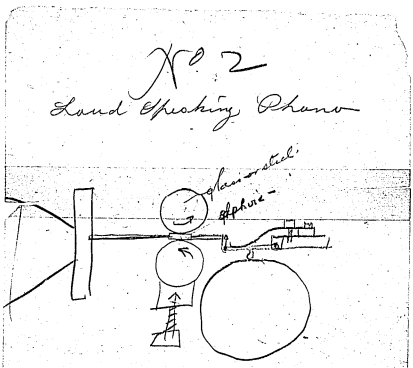
Jan 6/03 J. B. Otis

Order No 1394


OK
Projecting
Machine for 6/103
J. F. Ott
247
401
320
96.7

No 2

Loud Speaking Phono



J. E. Ott
Jan 14

Jan 13 1903

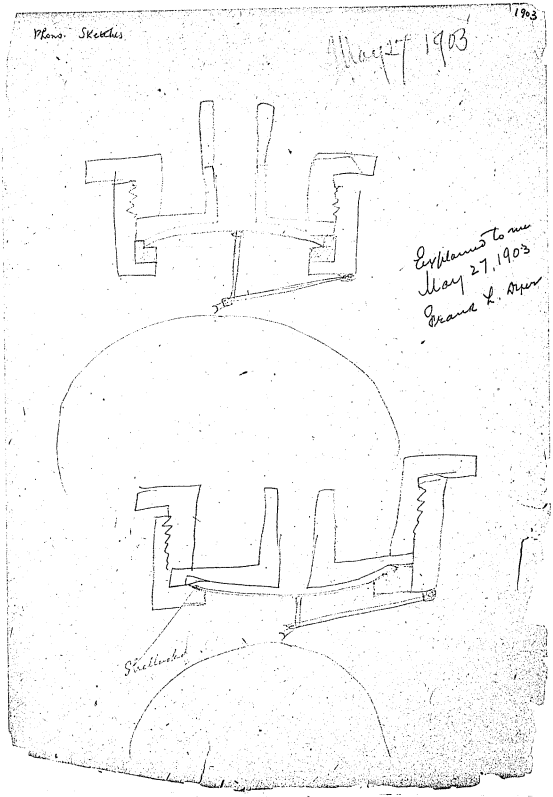
Witness Ludwig Ott

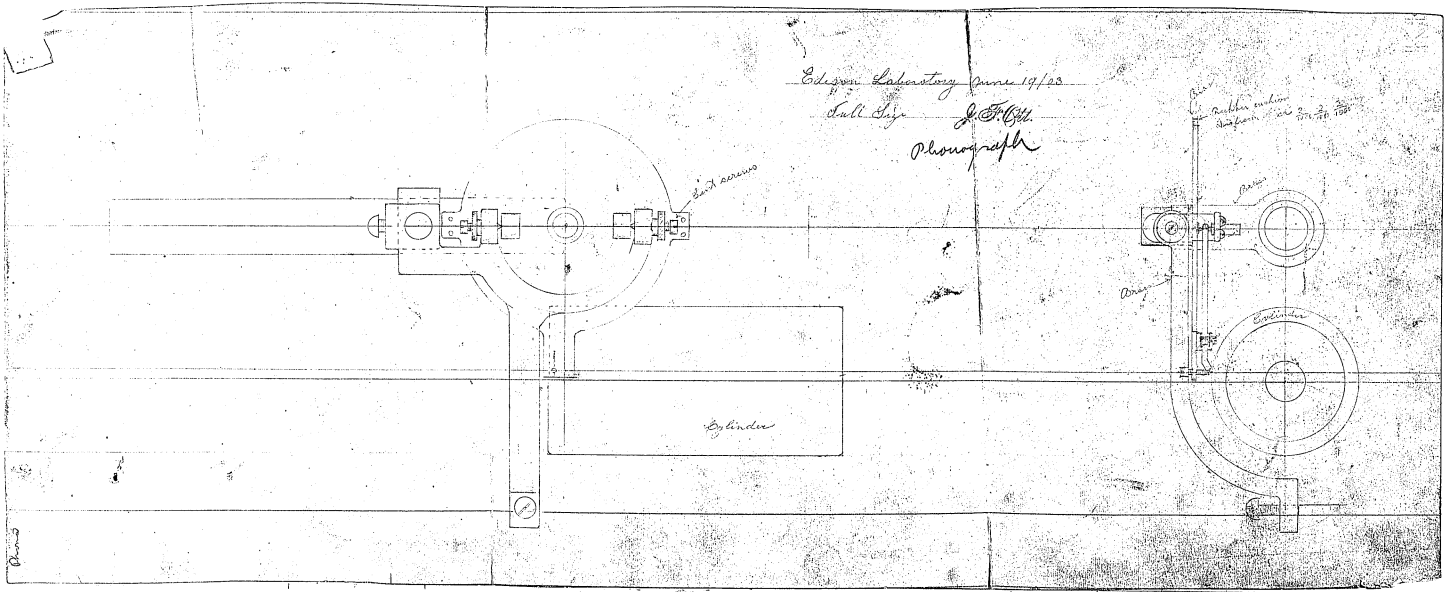
603

Jno. Ritchie

Jr

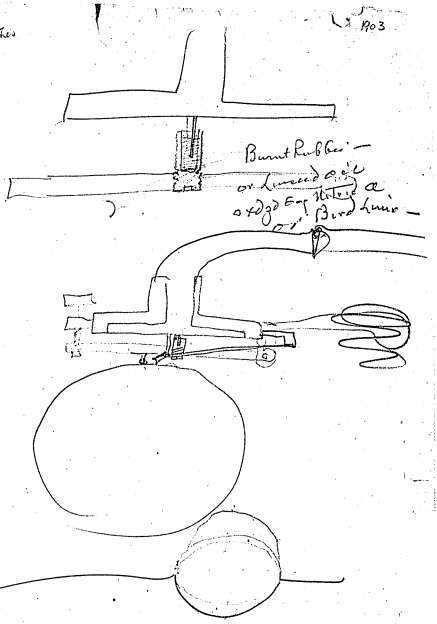
PHONO. —
Loud Speaking Phono. (1905)


Plans Sketches
1903
May 27 1903
Explanation to me
May 27, 1903
Frank L. Dyer
Shellacked


Edison Laboratory June 19/28
Ewell Sage J. F. Ott.
Phonograph
Cylinder

Rhomb Sketches

1903



Explained to me
June 2d 1903.
G. L. Hyer

Cable Address "Edison, New York"

1903

From the Laboratory of

Thomas A. Edison.

FRANK L. DYER
JUN 23
1903

Subject: _____ to me

Orange, N.J.

Experimental June 23. 1903. June Grand St. Hotel

Forming Matrix's for producing phono record
final plate with gold by Vacuum process
Then form in Electrolytic Bath a coating
of Nickel about .005 to .010 thousandths
thick & afterwards, plate with Copper
until the required thickness is
obtained. 1/5 = The coating of
Nickel against the gold is for the
purpose of preserving the record
from Corrosion due to the impurities
& general acid character of the
ingredients used with Copper

Cable Address "Edison, New York"

From the Laboratory
of
Thomas A. Edison.

Subject: _____ Orange, N.J.

Oxidation takes place & the mould is soon destroyed = nickel can be flashed by Vacuum & nickel plated (liquors best for quick flash) Claim — gold surface

backed by Nickel —

ditto & Nickel backed by another metal preferably Copper —

Claim Nickel alone —

& other Claims —

Copper — note at present time all the compositions use Copper without any coating & thus develop mould — Also take out

Cable Address "Edison, New York"

From the Laboratory
of
Thomas A. Edison.

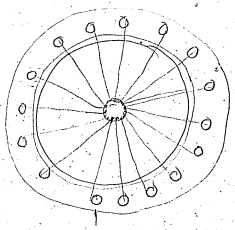
Subject: _____ Orange, N.J.

another patent for Nickel
plated on a record Coated
with graphite without
any Vacuum process —
Going 1878 to 1908

Also with graphite & silver
thinly Coated & afterwards
Nickeled by Copper
plating — See Edison 382 419
May 9, 1888.

Look up all previous
patents & see what has
been done so we can cover
the field —

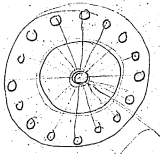
Phonograph



June 1903

(phonograph)

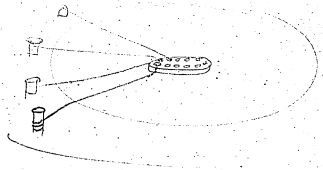
gold beaten skin



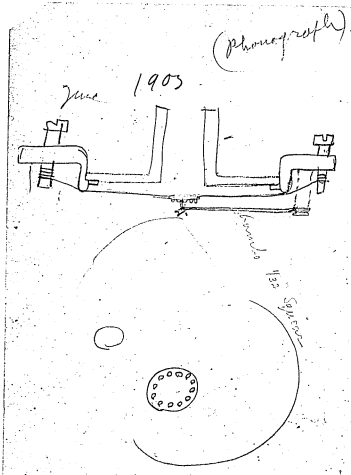
June 1903

one of 1"

one of 2½ ⅜ Disk

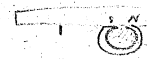


June 1903

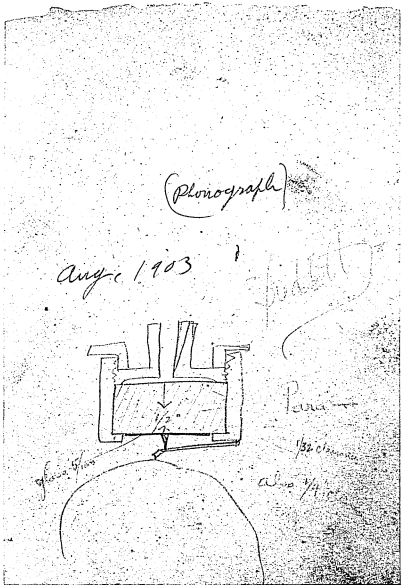


Aug 15/03

I think you can make holder for bottle pockets by permanent magnet



J. F. Ott



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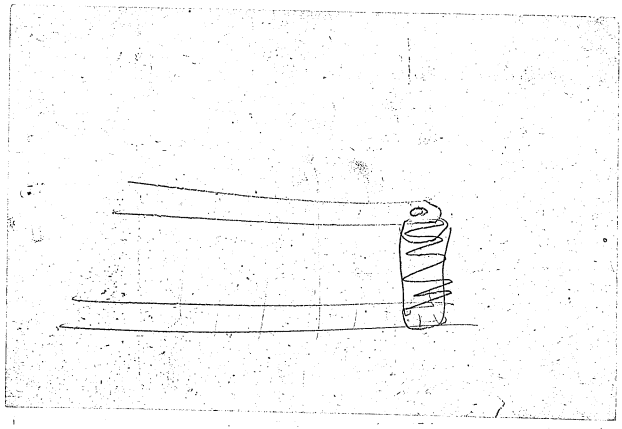


Phono: sketch

Gum Dentine – Gum Resin Paraffine Stearine

glycerine rubber or Rubber will prevent paraffine running

glycerine –

Molasses Candy –

Sept 1903 Phonograph

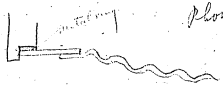
Silicate Soda –

Marine glue –

gutta percha ——— Sulphuric –

" in chloroform or Benzol –

Gutta percha ring (used in conjunction) by Kent.



Sept 1903 Zinc

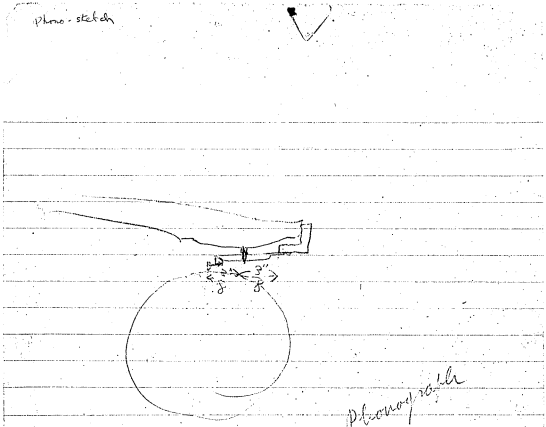
Thick Acetate of Alumina

" Magnesia –

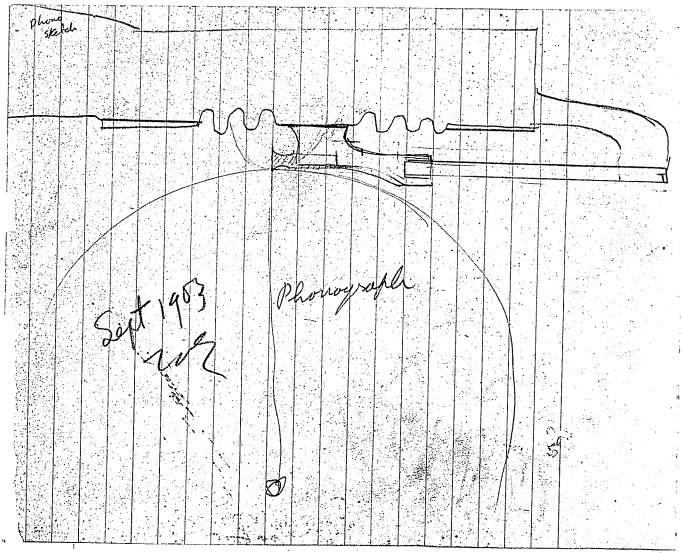
Phosphate + Oxide of Zinc – Used by Dental to fill tooth into hard in 20 seconds –

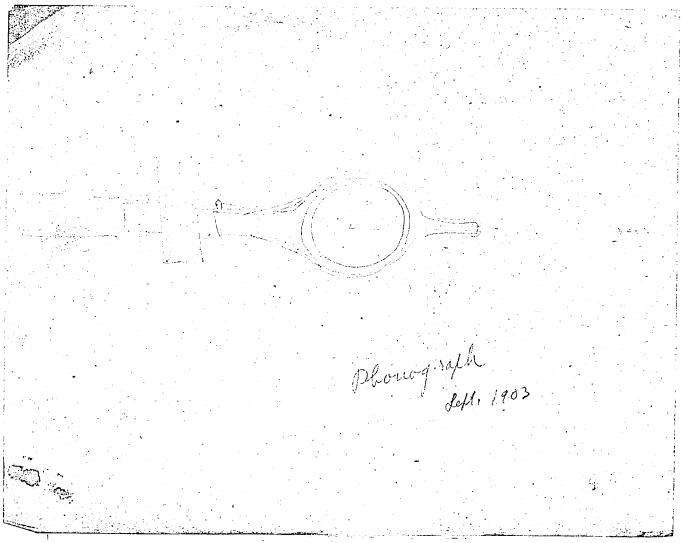
Burnt Rubber – burnt hard

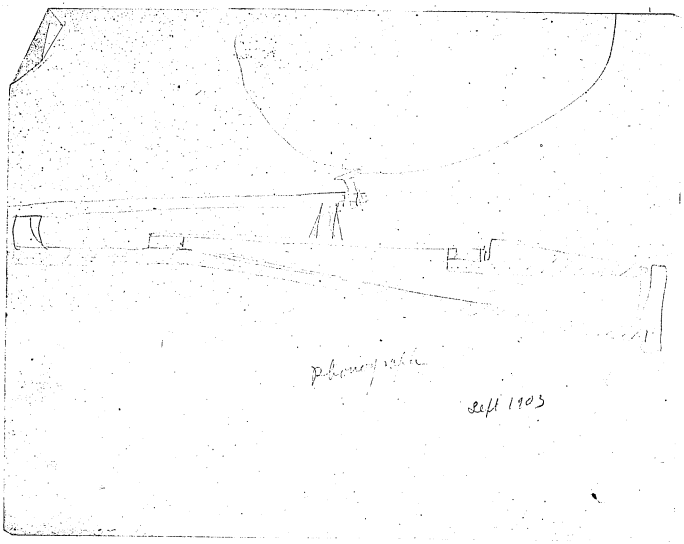
Phono - sketch

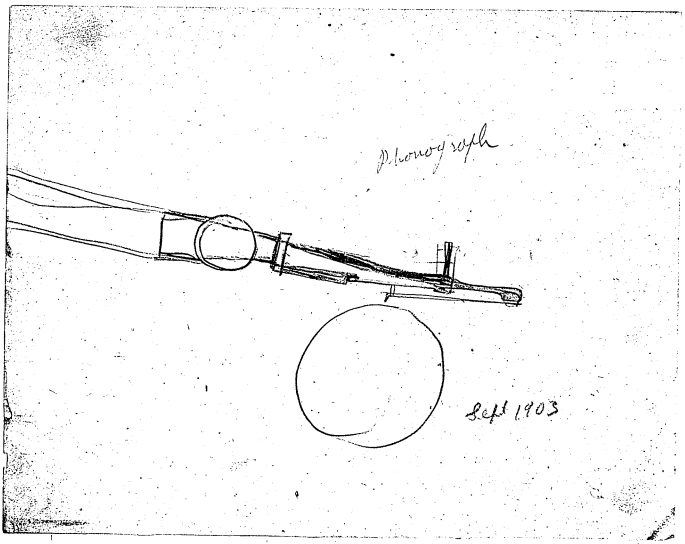


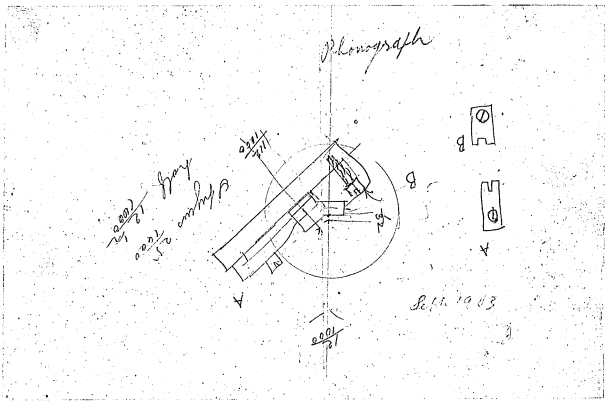
Sept 1903

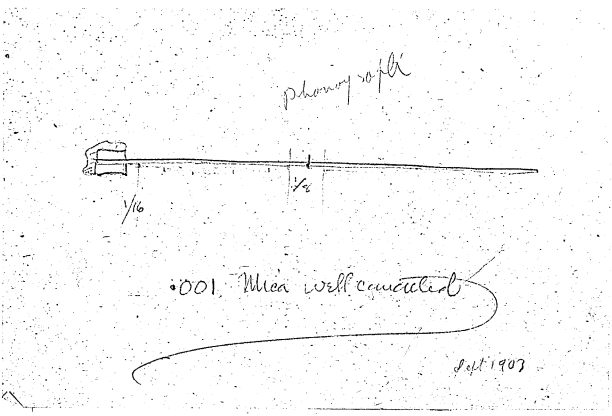

Phonograph sketch
Sept 1983
Phonograph

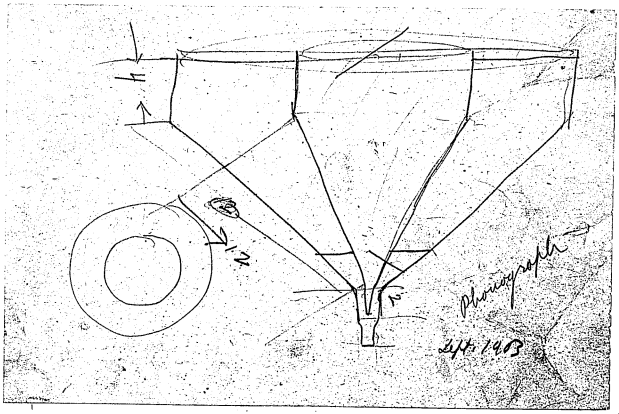

Phonograph
Left, 1903


phonograph
self 1903


Phonoscope
Sept 1903

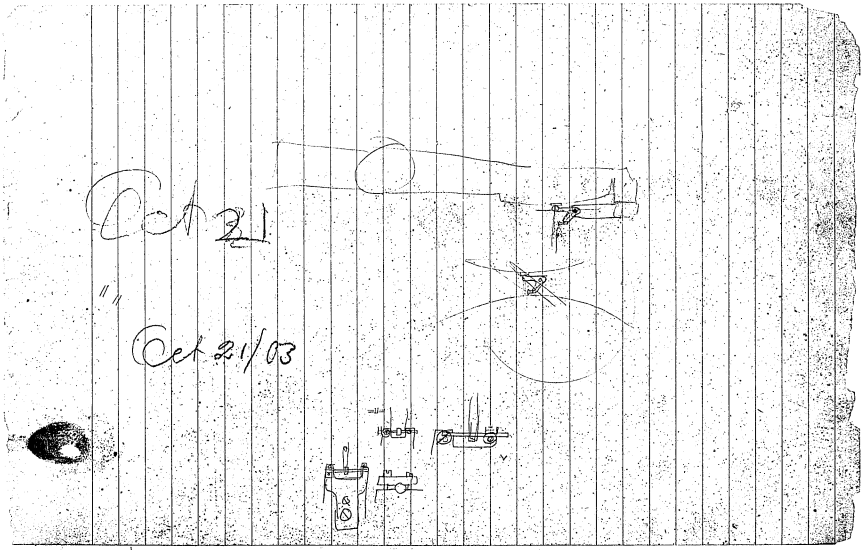

Phonograph
Sept 1903


phonograph
1/16
1/2
.001 Mica well annealed
Sept 1903


h
R
r
Photograph
4/4 1903

1 dia Reg .003 —
1 " 1 inch 003
3/4 —
1/2 —
Photography
Photography

3/8"
62 mm
Photography
Photography


Oct 21
" Oct 21/03

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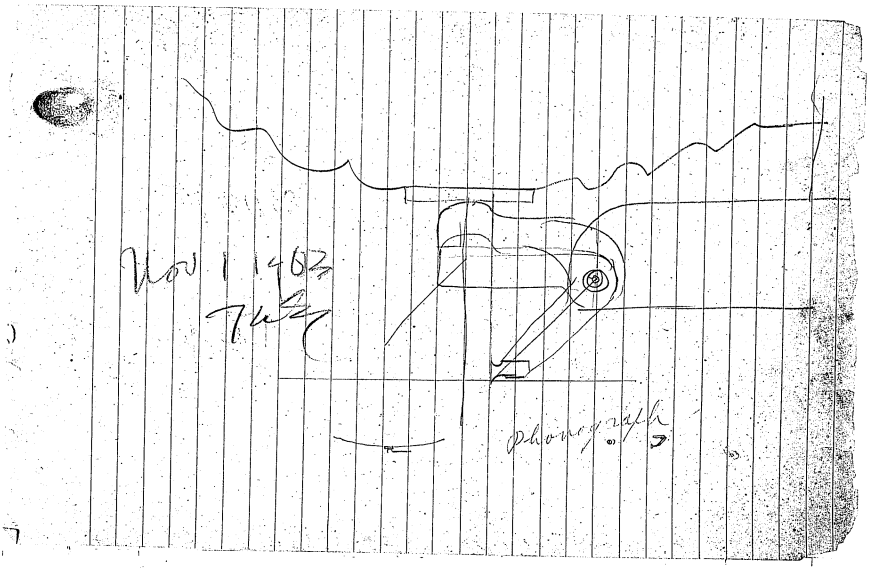
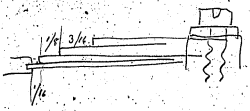
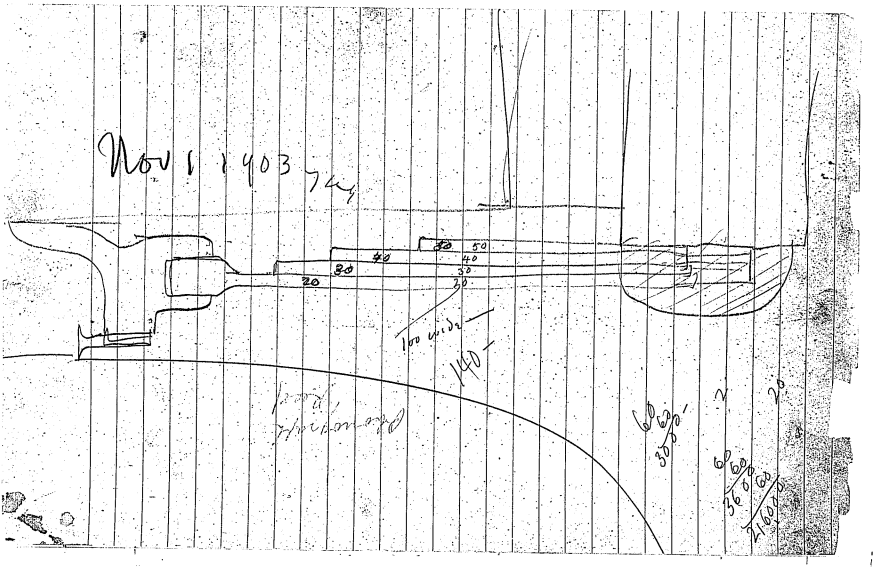


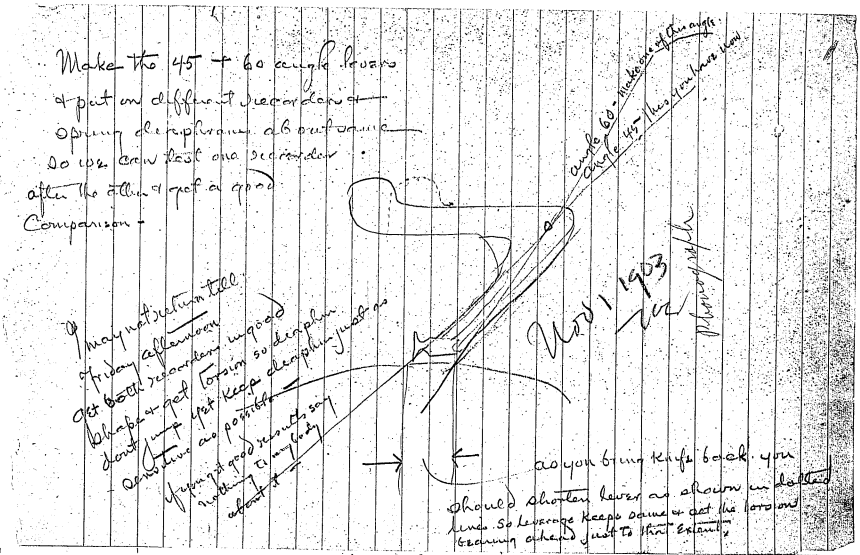
phonograph
(Reed)

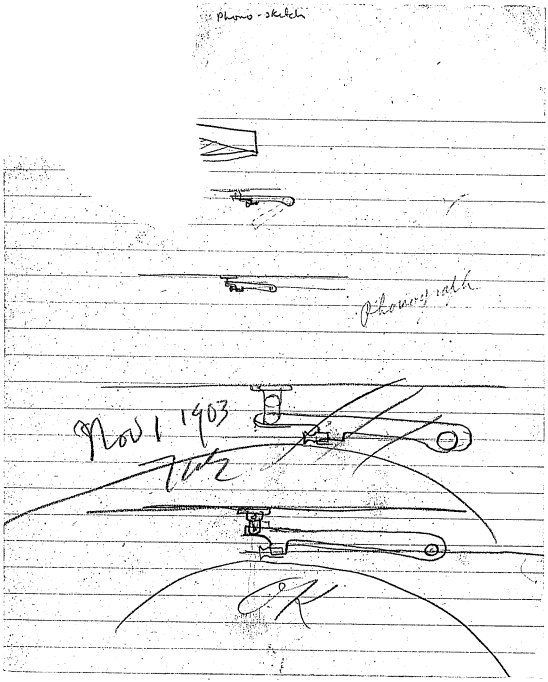
20 - 40 50 60

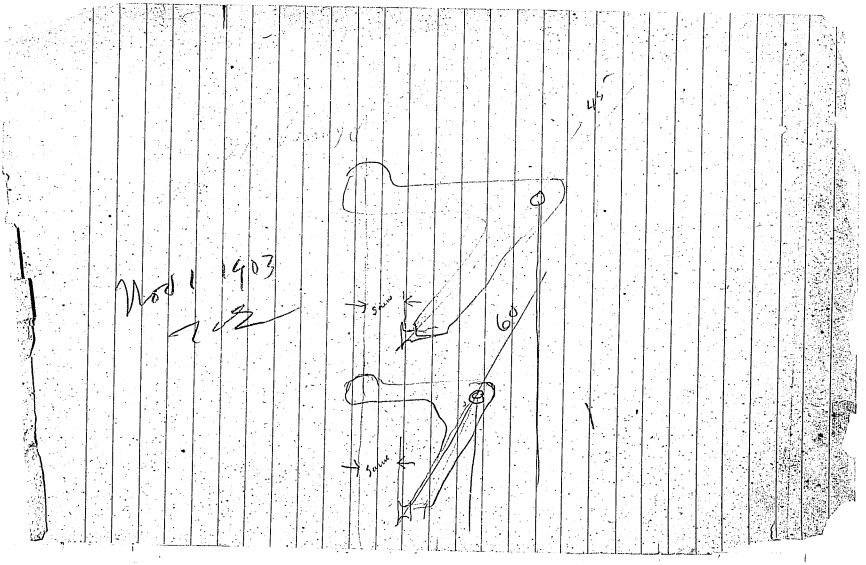


Nov 1 1903

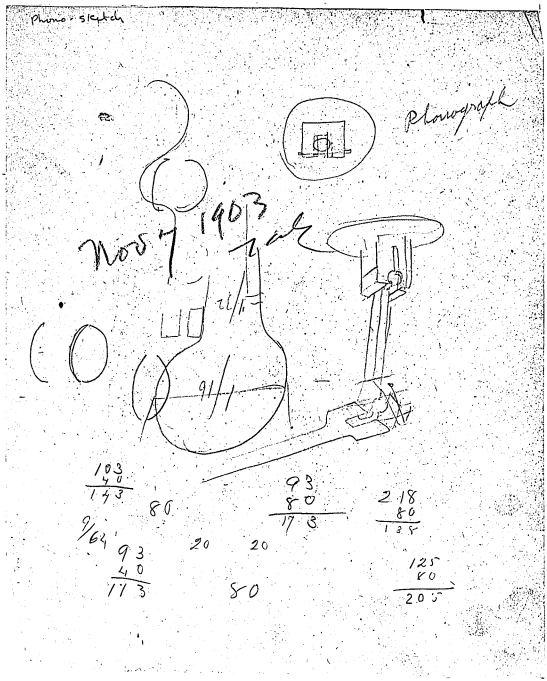

Nov 1 1403 74
50
40
30
20
140
60
360
2160


Make the 45 + 60 angle levers
& put on different pieces of
spring & explain about same
so you know last one is reminder
after the other 4 get a spring
Comparison
May notification till
Friday afternoon
get both recorders unpacked
Klaps & get Forum so discipline
don't just get keeps discipline just as
Question are possible
If you get good results say
nothing to any body
about it
Mon. 1903
Feb
angle 60° Make one of the angle
angle 45° like your lever now
do you bring knife back you
should shorten lever as shown in dotted
lines. So Leverage keeps same & get the long
beginning & end just to that extent


Plane - sketch
plane with
May 1903


Model 1403
5 sides
60
5 sides

Phono - sketch

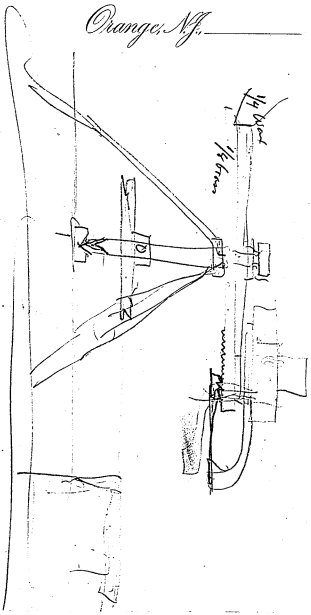


Cable Address "Edison, New York."

From the Laboratory
of
Thomas A. Edison.

Subject, Orange, N.J.

Phenol Disk
Phonograph



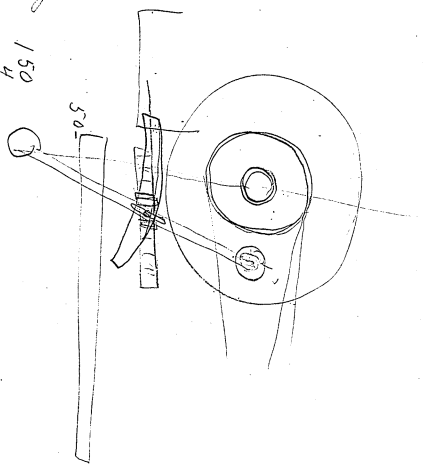
12. 4-6-

Cable Address "Edison, New York"

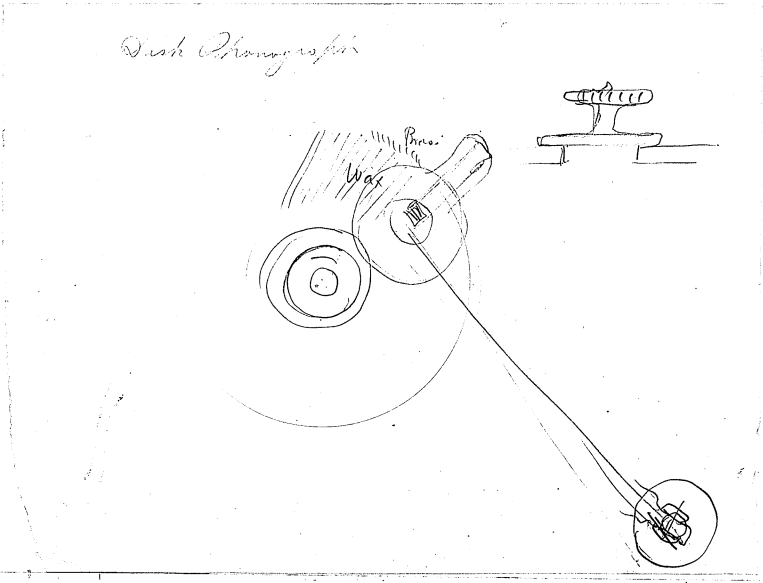
From the Laboratory
of
Thomas A. Edison.

Subject, Disk Phonograph

Orange, N.J.



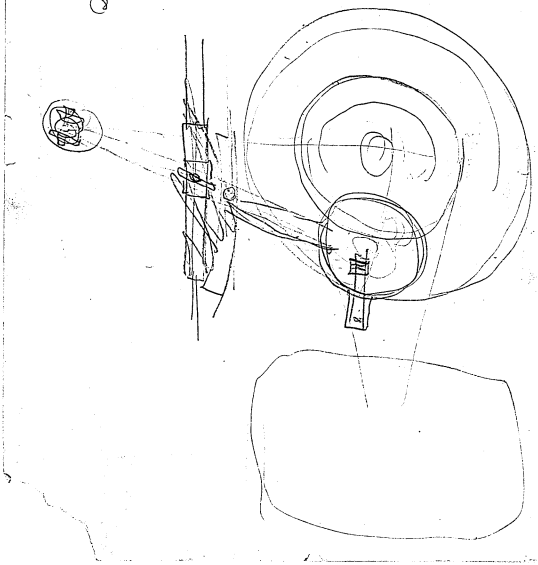
Disk Phonograph



Cable Address "Edison, New York."

From the Laboratory
of
Thomas A. Edison.

Subject, _____ Orange, N.J. _____



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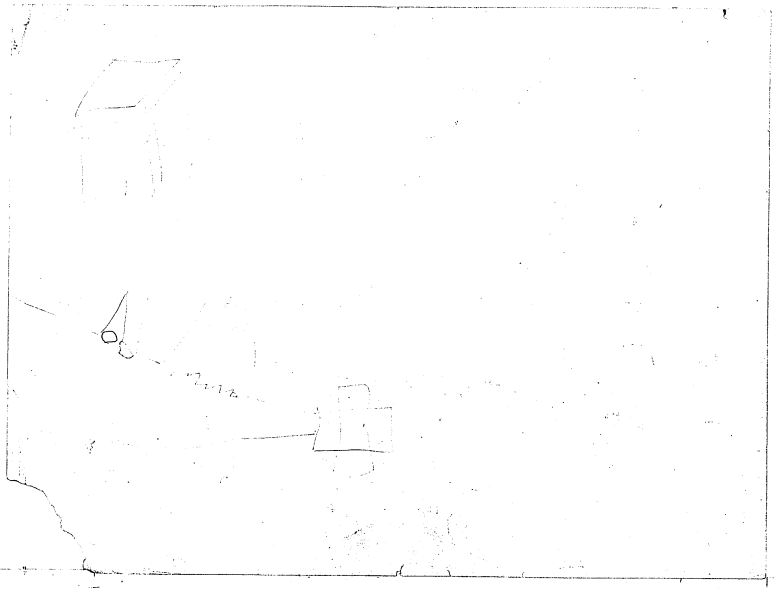
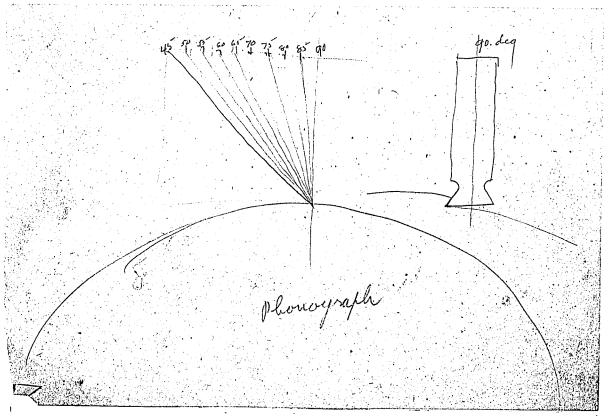
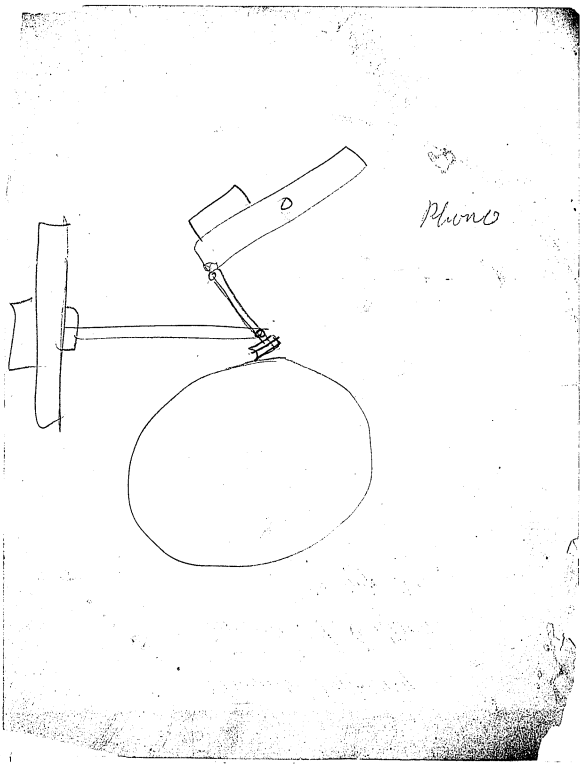
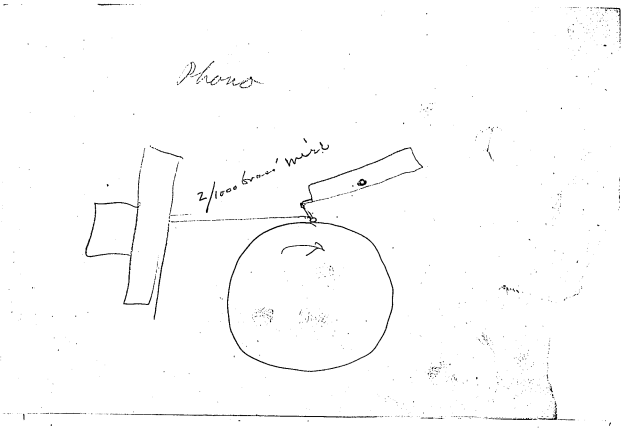
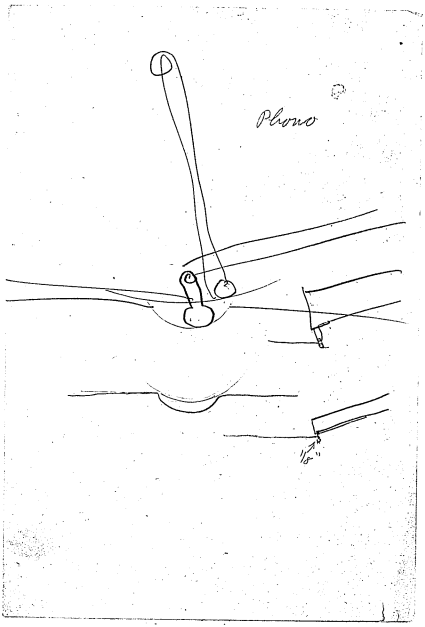
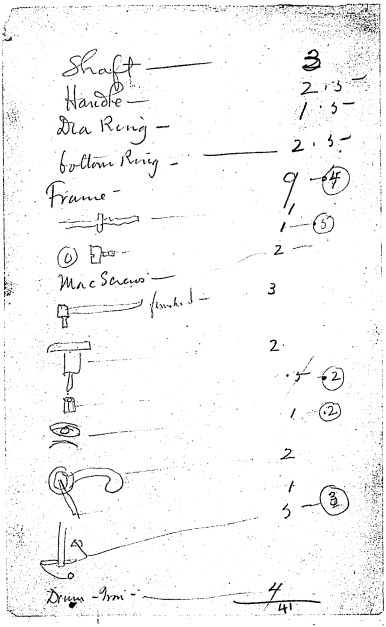


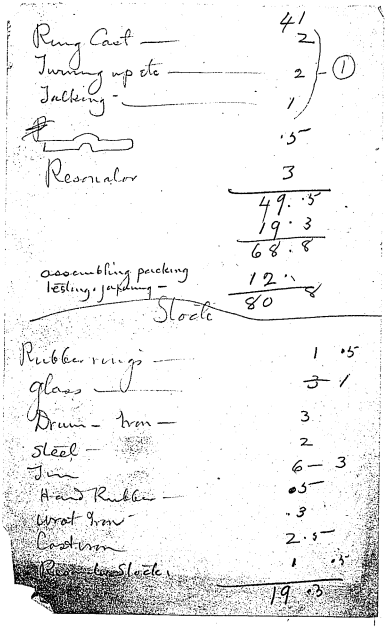

90. deg
Phonograph

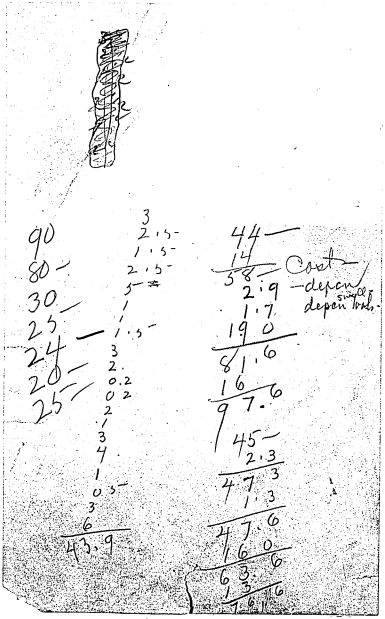


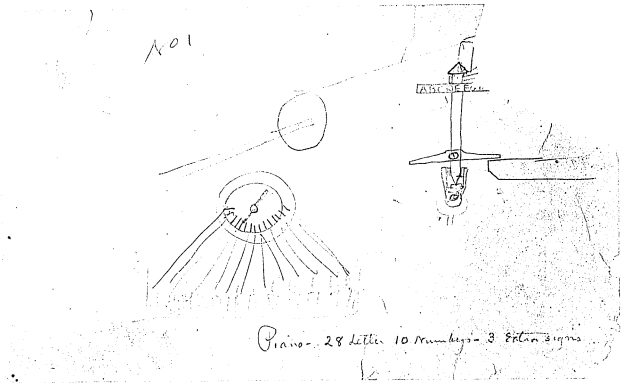

Phono
2/1000 Gram Wire

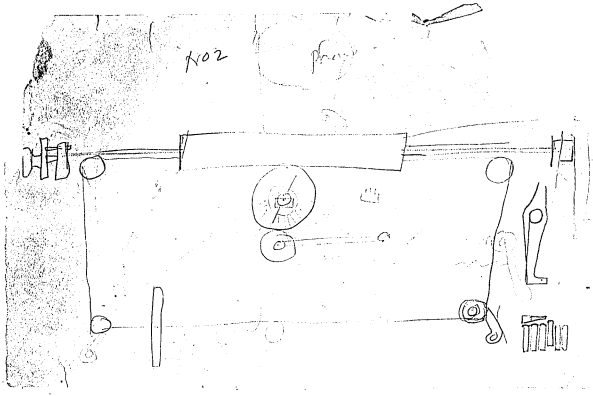

Plomo

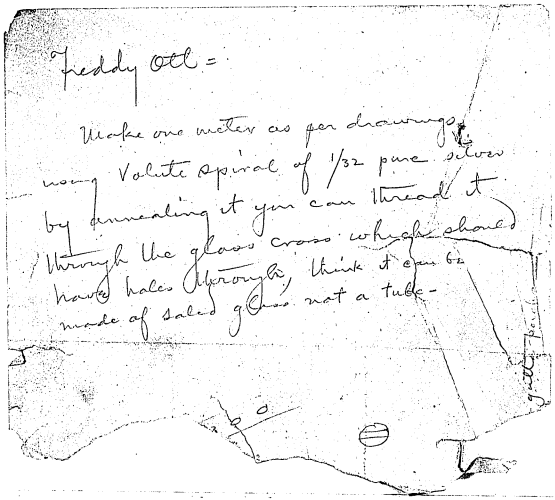

Shaft —
3
2.5 —
Handle —
1.5 —
Dia Ring —
2.5 —
bottom Ring —
9 —#
Frame —
1 — (5)
2 —
Mac Screws —
finished —
3
2
·5 — (2)
1 — (2)
2
1
5 — (3)
Drum - from —
4
41

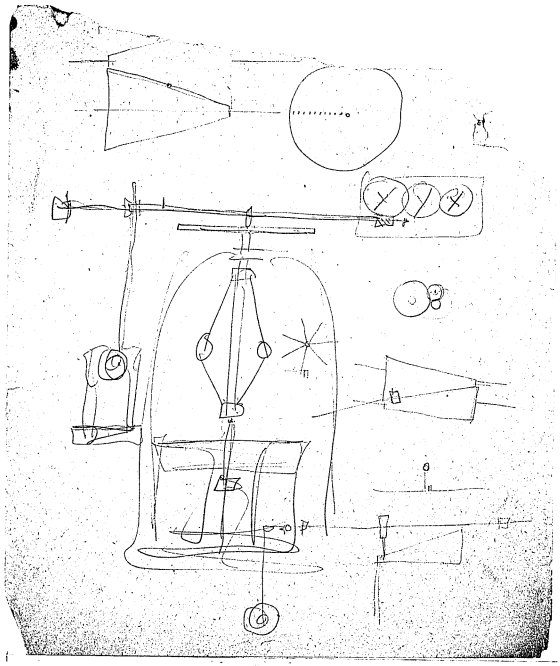

41
Ring Cast —
2
Turning up etc —
2 — (1)
Jacketing —
1
·5
Resonator
3
49. ·5
19. 3
68. 8
assembling packing
Testing, painting —
12. ·
80
Stock
Rubber rings —
1 ·5
glass —
3 1
Drum - from —
3
Steel —
2
Jim
6 — 3
Hard Rubber —
·5
Wrist from —
·3
Cast iron —
2.5 —
Resonator Steels
1 ·5
19 ·3




NO1
ABSCHALTER
Piano - 28 Letter 10 Numbers - 3 Extra Signs


NO2


Freddy Ottl =
Make one meter as per drawings
using Volute spiral of 1/32 pure silver
by annealing it you can thread it
through the glass cross which should
have holes through, think it can be
made of sales glass not a tube -



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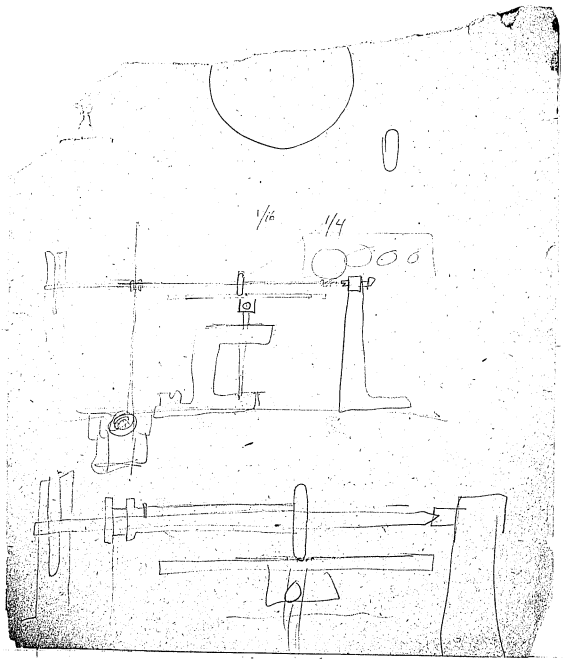
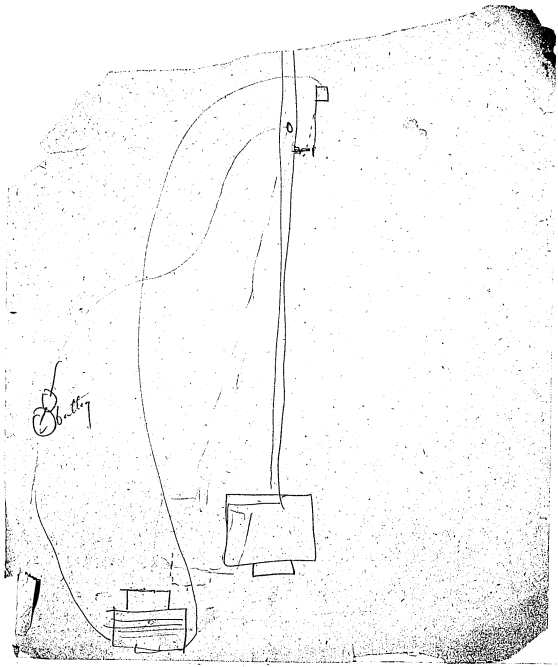
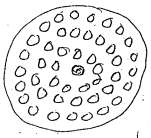
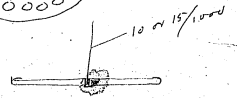
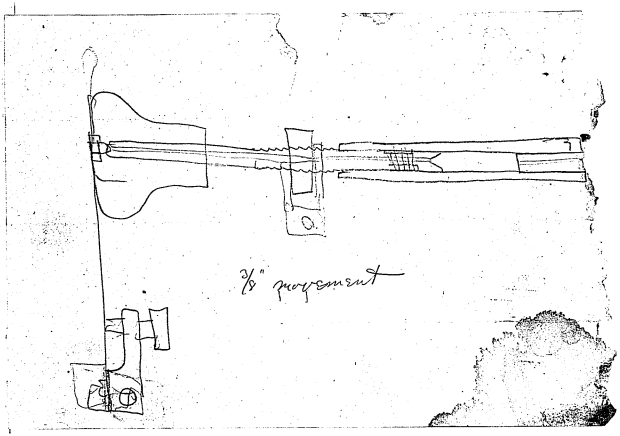


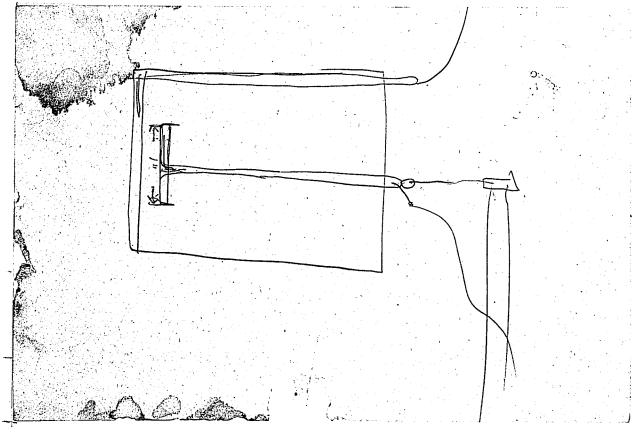


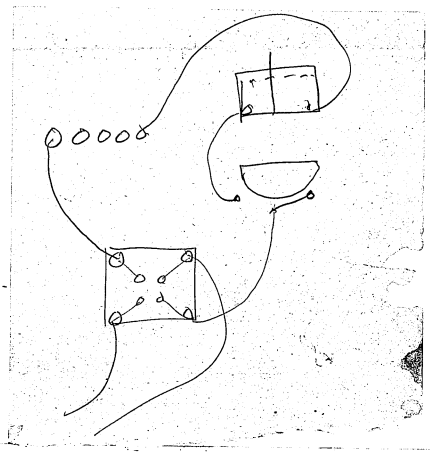
Solution for water Distilled
Water 10% of C.P. Hydrochloric acid
Oil on top to prevent acid
Eating metal –

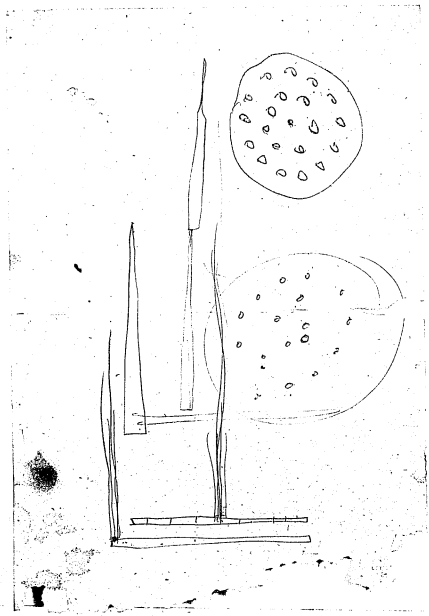





3/8" movement

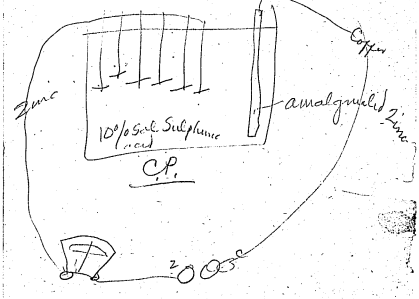




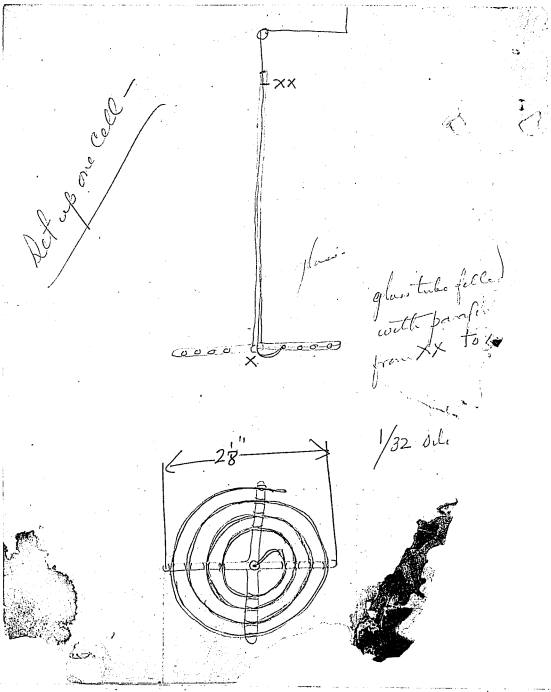


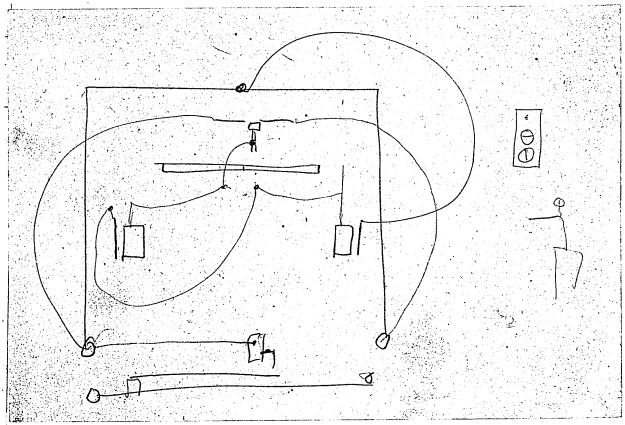
20/100 of ampere for each Electrode in the bath —

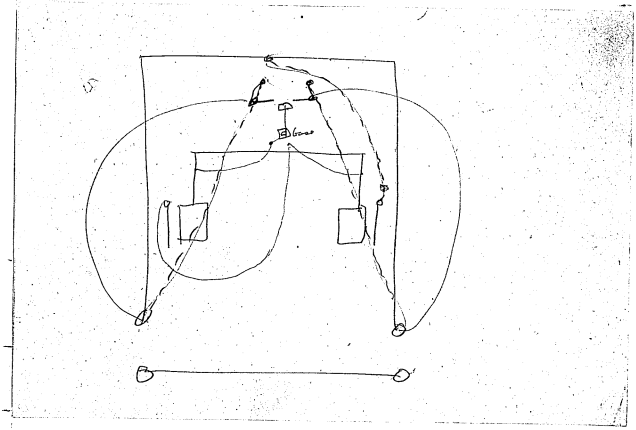
1 ampere 20/100 amp one hour

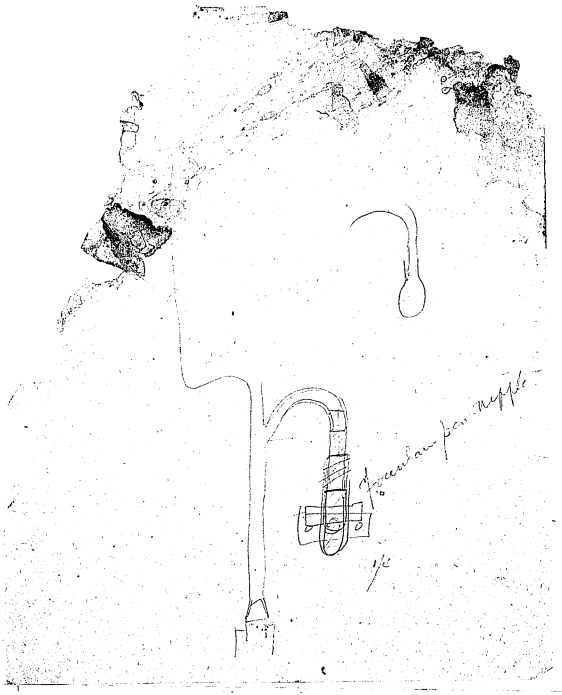


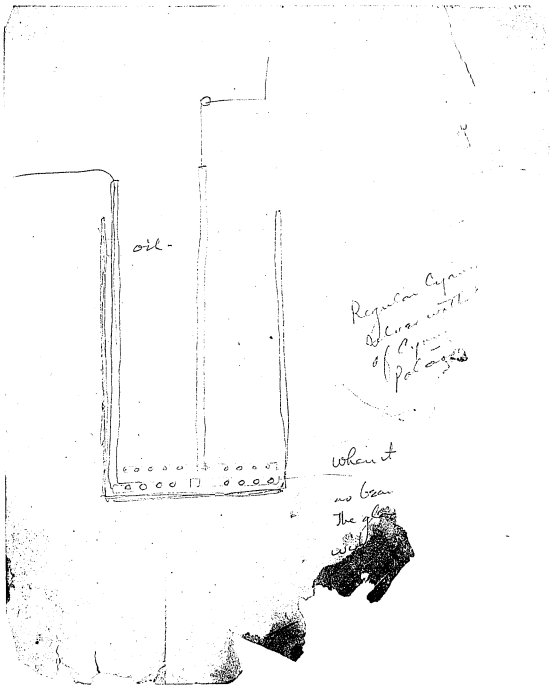
after taking out put in large — distilled water + soak for few hours stirring water — finally rinse in distilled water


Set up one cell
XX
glass tube fitted with paraffin from XX to X
2 1/8"
1/32 dia.






Spreader for nipple
1/2


oil -
Regular Cyl
Glass with
of Cyl
Pet
when it
no Gra
The
wit

Phono-Photo

Mastering Matrices

Jones, 1478 of 1894. Coats with graphite and electroplates with "copper, nickel, precious or other metals metal." Then backs up the matrix with "an outer cylindrical or other shaped case, of metal, or other material capable of maintaining the stability of the electro." Outer case may be cast on.

Leonet 23366 of 1893. Electroplates on a metallic master (soft steel) No special plated metal mentioned.

Edison 13693 of 1900 Vacuum deposit with gold. Also "gold-bay or silver salts reduced by chemical reagents to the metallic state."

Edison 382,419 May 8, 1888 Masters matrix for finishing by vacuum deposit with silver or by electroplating with silver. "A thin coating is produced in this way, which is backed up by a coating of lead or tin, which is also quite thin. For example, it may be one-sixteenth of an inch in thickness. The silver gives a wonderfully even surface, which is smoother than gold or platinum."

Edison 484582 Vacuum deposit, gold leaf or silver salts chemically reduced, or graphite. No special vacuum deposit or electroplated metals referred to.

Edison 667662 Feb. 5, 1901. Vacuum deposit and electroplating. No special metals referred to.

Lambert 645920 Mch 20, 1900. Graphite-electroplates with copper.

G. H. Clevens 650431 May 29. 1900

"To this end the first step in my process consists in electrically depositing upon and around the usual cylindrical wax record an electrolytic matrix or mold; first depositing a thin shell of nickel upon the wax and then depositing upon this a heavy shell of copper, the purpose of the nickel being to give to the interior face of the matrix a smooth surface that does not tarnish, that is harder than copper, and thus will produce a higher polish upon the surface of the phonogram or record that is afterwards pressed therein."

Old — Nickel on graphite (Young)

Ditto with thicker coat of copper (Stevens)

Vacuous deposit of silver or electroplated silver (Edison)

New — Vacuous deposit, nickel and copper

Vacuous deposit, silver and copper

Vacuous deposit and nickel

Ditto and silver